

METHOD FOR PRODUCING A COMPUTER

REFERENCE TO RELATED APPLICATION

The present application claims priority to Taiwan
5 application No.089128088, entitled "Method for Producing A
Computer," filed on 27th December 2000.

BACKGROUND OF THE INVENTION

1. Field of the Invention

10 The present invention relates to a method for producing a
computer. More particularly, the present invention relates to
a method for producing a computer. According to the invention,
a computer manufacturer and a computer company separately
delivers assembled hardware components and a pre-loaded storage
15 device to a client, and the client installs the pre-loaded storage
device in the assembled hardware components to complete a
computer.

2. Description of the Related Art

20 Under the development of global labor-division in
the computer industry, most computer companies outsource
computers hardware components assembly to computer
manufacturers. When the computer manufacturers complete
the hardware components assembly, the assembled hardware
25 components are delivered to the computer companies.
Thereafter the computer companies install storage

devices, which have been pre-loaded with software components in the assembled hardware components to complete a computer. To pre-load software components in a storage device involves critical and confidential contents concerning technology and business. As a result, computer companies prefer to increase the cost of computer production rather than disclose the trade secret to the computer manufacturers.

Fig.1 is a perspective diagram of a prior art computer production system 10. Fig.2 is a production flow chart of the computer production system 10 in Fig.1. Some computer companies, such as Dell Inc., adopt a BTO (Build to Order) process, a process where the manufacturing is based on the order received. The computer production system 10 comprises an order receiving system 12, a hardware component list transmitting system 14, a pre-load software mechanism 16, and a computer assembly mechanism 18.

In step 201, the order receiving system 12 receives an order from a client. The order comprises a hardware component list required by the client, and a software component list for designating the software required by the client.

In step 202, the hardware component list transmitting system 14 transmits the hardware component list to a computer manufacturer 20.

In step 203, by using the pre-load software mechanism 16, the computer company pre-loads the software components itemized in the software component list in a storage device, such as a hard disk.

In step 204, the computer manufacturer 20 assembles the hardware components itemized in the hardware component list.

In step 205, the computer manufacturer 20 delivers the assembled hardware components to the computer company.

In step 206, the computer company installs the pre-loaded storage device in the assembled hardware components to complete the computer using the computer assembly mechanism 18.

In step 207, the computer company delivers the completed computer to the client.

In this production process, the computer manufacturer has to deliver the assembled hardware components to the computer company, and the computer company installs the pre-loaded storage device in the assembled hardware components. After the installation, the computer company delivers the completed computer to the client. It costs a great of money to deliver the assembled hardware components from the computer manufacturer to the computer company, and it also costs a great of money to deliver the completed computer from the computer company to the client. To avoid critical contents concerning technology and business being disclosed to potential competitors, the computer company spends a lot of money on shipping the assembled hardware components and the completed computer, which greatly increase the cost of computer production.

Fig.3 is a perspective diagram of another prior art computer production system 30. Fig.4 is a production flow chart of the computer production system 30 in Fig.3. Some computer companies, such as IBM Inc., sell computers to clients via distributors. The computer production system 30 comprises a computer component list decision mechanism 32, a hardware component list transmitting system 34, a pre-load software mechanism 36, and a computer assembly mechanism 38.

In step 401, the computer company generates a computer

component list by the computer component list decision mechanism 32. The computer component list comprises a hardware component list for designating the hardware components of a computer, and a software component list for designating the software components of the computer.

In step 402, the hardware component list transmitting system 34 transmits the hardware component list to a computer manufacturer.

In step 403, by using the pre-load software mechanism 36, the computer company pre-loads the software components designated in the software component list in a storage device, such as a hard disk.

In step 404, the computer manufacturer assembles the hardware components itemized in the hardware component list.

In step 405, the computer manufacturer delivers the assembled hardware components to the computer company.

In step 406, by the computer assembly mechanism 38, the computer company installs the pre-loaded storage device in the assembled hardware components to complete the computer.

In step 407, the computer company delivers the completed computer to a distributor 42, and the computer is sold to a client 44 via the distributor 42.

Similarly, in this production process, the computer manufacturer has to deliver the assembled hardware components to the computer company, and the computer company installs the pre-loaded storage device in the assembled hardware components. After the installation, the computer company delivers the completed computer to the distributor. It costs a great of money to deliver the assembled hardware components from the computer

manufacturer to the computer company, and it also costs a great
of money to deliver the completed computer from the computer
company to the distributor. To avoid critical contents concerning
technology and business being disclosed to potential competitors,
5 the computer company spends a lot of money on shipping the
assembled hardware components and the completed computer so as
to greatly increase the cost of computer production.

SUMMARY OF THE INVENTION

10 It is therefore a primary objective of the present invention
to provide a method for producing a computer to solve the
above-mentioned problems. In this method, the computer
manufacturer and the computer company separately delivers
15 assembled hardware components and a pre-loaded storage device
to a client, and the client installs the pre-loaded storage device
in the assembled hardware components to complete the computer.

20 In a preferred embodiment, the present invention provides
a method for producing a computer. The method comprises the
following steps. An order receiving system of a computer
company receives an order from a client. The order
comprises a hardware component list required by the
client, and a software component list for designating
25 the software required by the client. Then, a hardware
component list transmitting system of the computer
company transmits the hardware component list to a
computer manufacturer. By using the pre-load software
mechanism, the computer company pre-loads the software
30 components itemized in the software component list in

5 a storage device, such as a hard disk. And the computer
manufacturer assembles the hardware components itemized
in the hardware component list. Next, the computer
manufacturer delivers the assembled hardware components
to the client. At the same time, the computer company
delivers the pre-loaded storage device to the client.
When the client receives the pre-loaded storage device
and the assembled hardware components, the client are
allowed to install the storage device in the assembled
10 hardware components to complete the computer.

15 It is an advantage of the present invention that not only
the unnecessary shipping cost is avoided, but also the
computer company can waive the labor cost from installing
the pre-loaded storage device in the assembled hardware
components. Those greatly reduce the cost of the computer
production. Furthermore, the computer company is free
from worrying about that the critical contents of
technology and business may be disclosed to the potential
competitors through conventional process.
20

25 These and other objectives of the present invention will
no doubt become obvious to those of ordinary skill in the art
after having read the following detailed description of the
preferred embodiment, which is illustrated in the various figures
and drawings.

BRIEF DESCRIPTION OF DRAWINGS

30 The following detailed description, given by way of
examples and not intended to limit the invention to the

embodiments described herein, will best be understood in conjunction with the accompanying drawings, in which:

Fig.1 is a perspective diagram of a prior art computer production system;

5 Fig.2 is a production flow chart of the computer production system in Fig.1;

Fig.3 is a perspective diagram of another prior art computer production system;

Fig.4 is a production flow chart of the computer production system in Fig.3;

Fig.5 is a perspective diagram of a computer production system according to the present invention;

Fig.6 is a production flow chart of the computer production system in Fig.5;

15 Fig.7 is a perspective diagram of another computer production system according to the present invention; and

Fig.8 is a production flow chart of the computer production system in Fig.7.

20 DETAILED DESCRIPTION OF THE INVENTION

Referring Fig.5 and Fig.6. Fig.5 is a perspective diagram of a computer production system 50 according to the present invention. Fig.6 is a production flow chart of the computer production system 50 in Fig.5. The computer production system 50 comprises an order receiving system 52, a hardware component list transmitting system 54, and a pre-load software mechanism

56.

In step 601, the order receiving system 52 receives an order from a client. The order comprises a hardware component list required by the client, and a software component list for designating the software required by the client.

In step 602, the hardware component list transmitting system 54 transmits the hardware component list to a computer manufacturer 58.

In step 603, by using the pre-load software mechanism 56, a computer company pre-loads the software components itemized in the software component list in a storage device, such as a hard disk.

In step 604, the computer manufacturer 58 assembles the hardware components itemized in the hardware component list.

In step 605, the computer manufacturer 58 delivers the assembled hardware components to the client 60.

In step 606, the computer company delivers the pre-loaded storage device to the client 60. When the client 60 receives the pre-loaded storage device and the assembled hardware components, the client installs the storage device in the assembled hardware components to complete the computer as shown in step 607.

Furthermore, the order comprises a delivery time list for designating a preferred delivery time by the client. Not only the hardware component list but also the delivery time list is transmitted to the computer manufacturer. As a result, the computer manufacturer delivers the assembled hardware components to the client according to the delivery time list. In the same way, the computer company delivers the

pre-loaded storage device to the client according to the delivery time list. When the client receives the pre-loaded storage device and the assembled hardware components on the preferred time, the client installs the storage device in the assembled hardware components to complete the computer.

In this production process, the computer manufacturer delivers the assembled hardware components to the client instead of the computer company. As a result, this production method avoids unnecessary cost of shipping so as to greatly reduce the cost of computer production. Furthermore, the computer company is free from worrying about that the critical contents of technology and business may be disclosed to the potential competitors.

Fig.7 is a perspective diagram of another computer production system 70 according to the present invention. Fig.8 is a production flow chart of the computer production system 70 in Fig.7. The computer production system 70 comprises a computer component list decision mechanism 72, a hardware component list transmitting system 74, and a pre-load software mechanism 76.

In step 801, by the computer component list decision mechanism 72, the computer company generates a computer component list. The computer component list comprises a hardware component list for designating the hardware components of a computer, and a software component list for designating the software components of the computer.

In step 802, the hardware component list transmitting system 74 transmits the hardware component list to a computer manufacturer 78.

In step 803, by using the pre-load software mechanism 76, the computer company pre-loads the software components

designated in the software component list in a storage device, such as a hard disk.

In step 804, the computer manufacturer 78 assembles the hardware components designated in the hardware component list.

5 In step 805, the computer manufacturer 78 delivers the assembled hardware components to the distributor 80.

10 In step 806, the computer company delivers the pre-loaded storage device to the distributor 80. When the distributor 80 receives the pre-loaded storage device and the assembled hardware components, the distributor 80 installs the storage device in the assembled hardware components to complete the computer as shown in step 807.

In step 808, the distributor 80 sells the computer to the client 82.

15 In this embodiment, after the computer being assembled, the distributor sells the computer to the client. The distributor can also sell the pre-loaded storage device and the assembled hardware components to the client separately, and then the client installs the storage device in the assembled hardware components to complete the computer.

20 Similarly, in this production process, the computer manufacturer delivers the assembled hardware components to the distributor instead of the computer company. As a result, this production method avoids unnecessary cost of shipping so as to greatly reduce the cost of computer production. Furthermore, the computer company has not to worry about that the critical contents of technology and business may be disclosed to the potential competitors.

25 Compared with the prior art, in the method of producing

5 a computer according to the present invention, the
computer manufacturer and the computer company separately
delivers assembled hardware components and a pre-loaded storage
device to the client or the distributor, and the client or the
distributor installs the pre-loaded storage device in the
assembled hardware components to complete the computer. In this
way, the computer manufacturer delivers the assembled hardware
components to the client or the distributor instead of the
computer company. Not only the unnecessary shipping cost is
10 avoided, but also the computer company can waive the labor cost
from installing the pre-loaded storage device in the assembled
hardware components. This greatly reduces the cost of the
computer production. Furthermore, the computer company is free
from worrying about that the critical contents of technology
and business may be disclosed to the potential competitors.

15 While the invention has been described with reference to
various illustrative embodiments, the description is not
intended to be construed in a limiting sense. Various
modifications of the illustrative embodiments, as well as other
embodiments of the invention, will be apparent to those persons
20 skilled in the art upon reference to this description. It is
therefore contemplated that the appended claims will cover any
such modifications or embodiments as may fall within the scope
of the invention defined by the following claims and their
equivalents.
25